

A NEW SPECIES OF LORICASTER FROM CALIFORNIA

(Coleoptera: Clambidae)

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Clambus and *Loricaster* are now the only two genera in the dascylloid family Clambidae. Two other genera, *Calyptomerus* and *Empelus*, are still considered as clambids by one American author (Hatch, 1957), whereas they are referred to the Calyptomeridae and Anistomidae respectively by Crowson (1955).

The following points should be mentioned for the benefit of coleopterists wishing to work with North American Clambidae. The genus *Loricaster* is apterous and therefore will not key to family in those keys employing the length of wing setae as a character. The occurrence of dilated posterior coxae is polyphyletic and should not be used as a basis for distinguishing clambids. All of the species of *Clambus* have 10, not nine, segments in the antennae. Apparently the scape has passed unnoticed by American authors.

The distinguishing features of the genus *Loricaster* are as follows: antenna of eight segments; antennal club of two segments, with three sensory pits in the distal segment and one in the penultimate; antenna inserted close to eye, with antennal groove adjacent to inner eye margin. Scutellum vestigial. Arcuate mesosternal carina lacking (present in *Clambus*). Metacoxae approximate but not strictly contiguous. Aedeagus with lateral parameres and asymmetric median lobe. Female with paired styli (fig. 5) and a pear-shaped spermatheca.

***Loricaster rotundus* Grigarick and Schuster, new species**

The California species may be distinguished from the closely related species *testaceus* Muls. et Rey on the basis of the aedeagus, particularly the setation of the parameres which, in *testaceus*, terminate in two large lamellate setae and by the presence of a spine on the metatarsus.

Male.—Brown or red-brown; setae slightly longer than the distance between the insertions, moderately abundant. Head 270μ long \times 405μ wide. Eyes of six large facets. Eight antennal segments of size and shape as illustrated (figs. 1, 2); antennal insertions 270μ apart, on line with the most anterior eye facets. Pronotum 249μ long \times 538μ wide. Alate. Scutellum minute. Elytra 672μ long, completely covering tergites. Procoxal cavities closed behind; profemur with sensory pit on dorsal surface at distal four-fifths; two pairs of lamellate setae on the first tarsal segment and one pair

on the second; tarsal claws equal, simple. Mesosternum medianly carinate; mesofemur expanded (fig. 4). Metasternum impressed behind mesocoxae, medianly carinate at posterior third. Metacoxa as in figure 7; first metatarsus with two short thick setae at middle and large distal spur. Abdomen with six transverse, membranous segments and a sclerotized, conical ultimate tergite. Aedeagus 225μ long (fig. 6).

Female externally resembles the male.

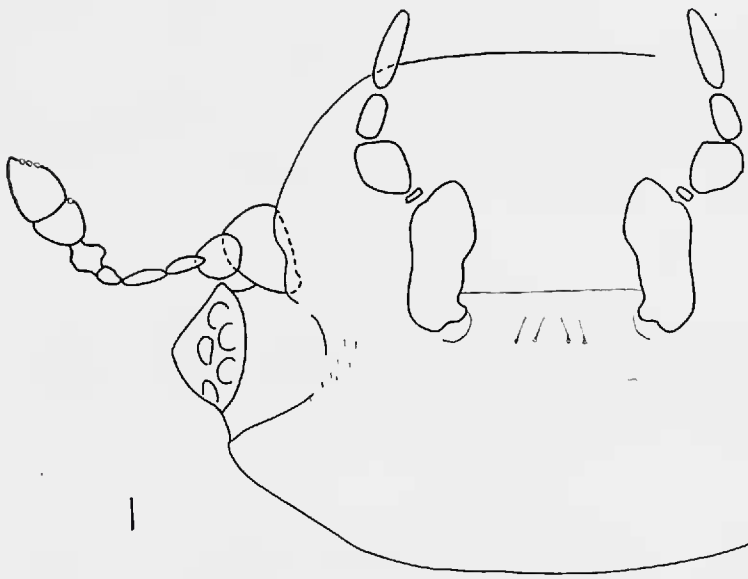
Holotype male and one paratype were collected FOUR MILES NORTH OF RUMSEY, YOLO COUNTY, CALIFORNIA, June 3, 1960, by R. O. Schuster. The type, a whole-mount, cleared and stained with acid fuchsin and mounted in piccolite, is deposited in the California Academy of Sciences. Other specimens from California comprise the paratypic series as follows: Contra Costa County: Canyon Nook, Mt. Diablo St. Park, 1♂, 1♀ VII-10-58 (R. O. Schuster, L. M. Smith); Mt. Diablo, 2♀ II-23-53 (G. A. Marsh, R. O. Schuster), 4♂, 3♀ V-26-59 (R. O. Schuster, L. M. Smith). Kern County: 10 miles west Isabella Reservoir, 1♂ V-12-59 (L. M. Smith); two miles west Isabella Reservoir, 2♂, 1♀ III-31-59 (F. C. Raney); 30 miles east Bakersfield, 2♂ V-12-59 (L. M. Smith). Los Angeles County: Pasadena, eight point-mounted specimens (A. Fenyés). Napa County; three miles west Oakville, 1♂ I-3-58 (F. C. Raney, R. O. Schuster). San Diego County: Hell Hole Canyon, Borrego Springs, 1♂, 6♀ III-25-59 (A. A. Grigarick, L. M. Smith); Borrego State Park, 1♂, seven point-mounted specimens IV-25-55 (R. O. Schuster, collection from Palm Canyon groves of *Washingtonia filifera*. Permit issued by the State to the California Insect Survey). Tulare County: one mile east Lemon Cove, 1♂, 2♀ V-13-59 (L. M. Smith). Yolo County: six miles north Rumsey, 1♂ II-9-60 (R. O. Schuster, L. M. Smith); 5.4 miles southwest Winters, 1♂ V-29-59 (F. C. Raney, R. O. Schuster, L. M. Smith).

A small amount of variation occurs in the setae of the gular region and in lengths of setae of the female genital styli but these variations do not appear to represent species differences.

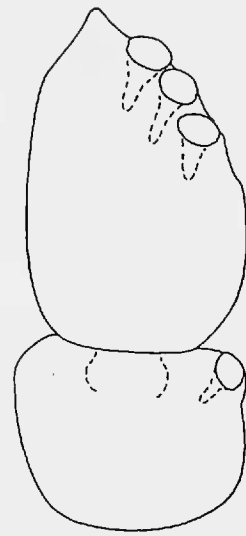
The head is declivous in life. The recognizable structures found in gut contents are various types of spores and this species probably feeds on fungi and decaying vegetation as do other clambids.

EXPLANATION OF FIGURES

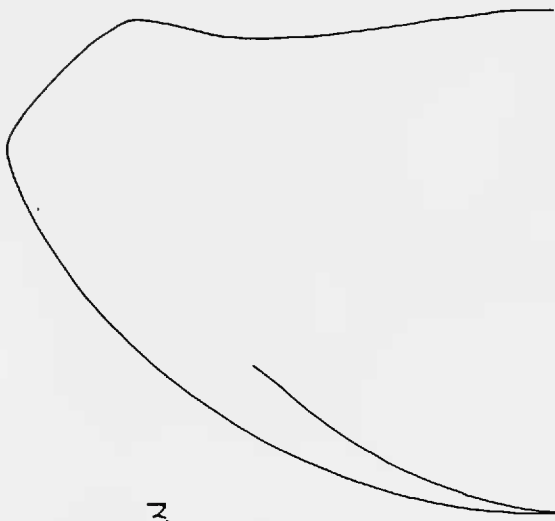
Fig. 1, ventral surface of head; fig. 2, antennal club; fig. 3, shape of pronotum; fig. 4, mesofemur; fig. 5, female genital stylus; fig. 6, aedeagus; fig. 7, metathoracic leg.



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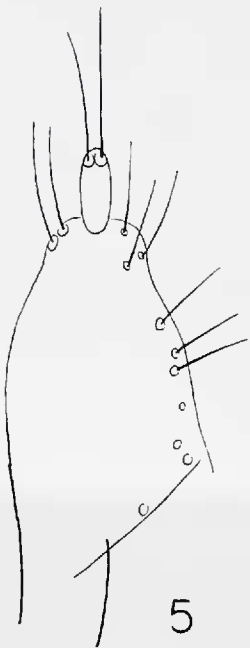
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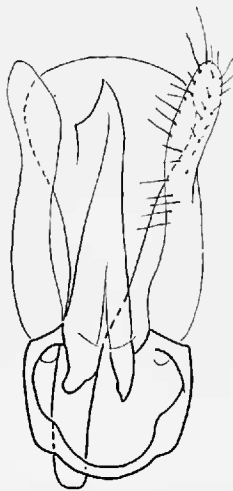
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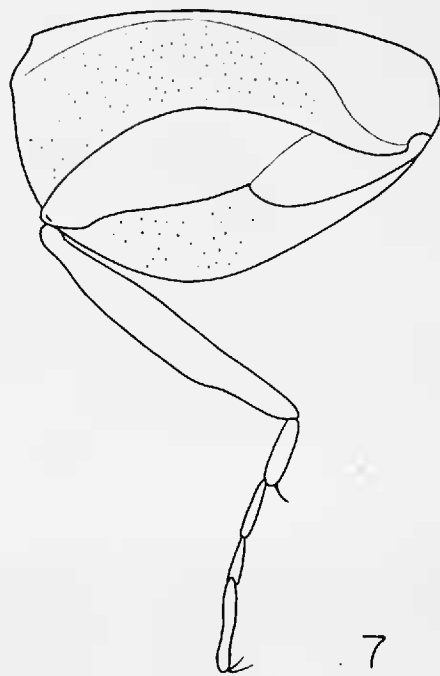
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It occurs in montane situations below 3,000 feet in Southern California, in the Coast Range, and in the Sierra.

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1955. The Natural Classification of the Families of Coleoptera. London. pp. 187.

HATCH, MELVILLE H.

1957. The beetles of the Pacific Northwest, Part II: Staphyliniformia. Univ. Wash. Publs. Biol. Sci. 16. pp. 348.

ATTRACTION OF *PLEOCOMA DUBITALIS DUBITALIS* DAVIS TO BLACK LIGHT

(Coleoptera: Scarabaeidae)

JEAN FISHER

Salem, Oregon

Males of the common rain beetle, *Pleocomma dubitalis dubitalis* Davis, have been taken in numbers during the fall rainy season of the past two years by means of a black light trap. This trap, loaned by the Oregon State Department of Agriculture, was run as part of a routine check for new insect pests, near Salem, Oregon.

Males of *P. dubitalis* emerge during the fall to mate with the earth dwelling females and are in flight during October and November (Ritcher and Beer, 1956). Fifty males were taken from the black light trap during October and November of 1959 and 133 during the same months of 1960. Of those collected in 1960, 125 were taken between October 16 and November 20.

The trap was placed on the ground in a marginal farming area at an elevation of 350 feet, seven miles west of Salem, Oregon, in Polk County. This electrical light trap is a model designed by the Gardiner Manufacturing Company of Horicon, Wisconsin, and employs a 15-watt fluorescent black light tube. It was plugged into a 110v AC line.

Breeding grounds for the beetles are thought to be nearby within a small 50-year-old stand of Douglas fir, white fir, and oak. Typical undergrowth there consists of blackberries, poison oak, snowberry, madrone, maple, and scotch broom.

LITERATURE CITED

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1956. Notes on the biology of *Pleocomma dubitalis dubitalis* Davis (Coleoptera: Scarabaeidae). Pan-Pacific Ent. 43(4):181-184.